BULLETIN MM 108

"60 CPS

THERE IS NO SUBSTITUTE FOR RELIABILITY!

±10 KC"

GENERAL MAGNETICS

Solid State Magnetic Demodulators

NEW!
G/M MAGNETIC DEMODULATOR
Type DMD 896-2
shown actual size

High Reliability Plus! The new G/M Magnetic Demodulator is a solid state circuit for converting phase reversing AC signal voltages into phase detected polarity reversing DC voltages. The amplitude and polarity of the DC output are directly proportional to the phase and amplitude of the AC signal.

SEE REVERSE SIDE FOR COMPLETE SPECIFICATIONS AND DATA

DEMODULATOR TABULATION SHEET	UNIT NO.	DMD 896-2	DMD 903-1	DMD 931-1	DMD 1012-1	DMD 1013-1
REFERENCE						
A. VOLTAGE		52V-P-P	120V±10V	26 V	115V	115V
b. FREQUENCY		4KC ±10%	60~	400~	60	400~
C. IMPEDANCE		>10K	15K	> 30K	> 50K	> 50K
SIGNAL						
A. VOLTAGE RANGE		0-10V	0-760MV	0-12V	0-1V	0-10V
b. FREQUENCY		4KC	60~	400~	60~	400~
C. IMPEDANCE		>10K	10K	>10K	10K±10%	10K±10%
OUTPUT						
A. MAX. OUTPUT		±10V±10%	±1V±5%	±3.6V±10%	±0.5V±5%	±5V±5%
b. LOAD		400K	—	10K	25K	5K
C. LINEARITY		±2% A	±0.8%FS	±2% A	±1%FS	±1%FS
D. FREQUENCY RESP.		—	—	20CPS	NO FILTER	NO FILTER
E. RIPPLE		—	8.4MV	<100MV	<10MV	<10MV
F. NULL		45 MV	1MV	<15MV		
ISOLATION REQUIREMENT		NONE	NONE	NONE	NONE	NONE
AMBIENT TEMP. RANGE		+5°C - +65°C	-40°F - +120°F	-15°C +60°C	-30°C +85°C	-30°C +85°C
PHYSICAL SIZE		0.6×0.75 ×1.0	3×2 5/8 ×4 7/16	2×2 ×0.7	1×1 ×2.5	1×1 ×2.5
TERMINAL TYPE		PIN	HP PIN	PIN	PIN	PIN
INTERNAL REFERENCE		No	No	No	No	No
D.C. POWER		No	No	No	+15v	+15v

DEMODULATOR TABULATION SHEET	UNIT NO.	DMD 1016-1	DMD 1017-1	DMD 1023-1	DMD 1024-1	DMD 1025-1
REFERENCE						
A. VOLTAGE		26V±5%	115V	30V P-P	30V	30V
b. FREQUENCY		400~±5%	400~	55~	900~	900~
C. IMPEDANCE		>5K	>5K	≈2.7K	≈31K	≈31K
SIGNAL						
A. VOLTAGE RANGE		0-1.5V OR 0-6.0V	0-10V	0-5V	0-3V	0-0.5V
b. FREQUENCY		400~±5%	400~	55~	900~	900~
C. IMPEDANCE		#1 5K±10% #2 20K±10%	>10K	>10K	>3K	>3K
OUTPUT						
A. MAX. OUTPUT		±1.5V±5%	±3V±5%	±4V±5%	±100MV±10%	±0.5V±10%
b. LOAD		20K	2K	10K	250Ω	1M
C. LINEARITY		±1% F.S.	±1% F.S.	±1% FS	±1% F.S.	±1% FS
D. FREQUENCY RESP.		>10~	40~	0.5~	0.5~	10~
E. RIPPLE		<20MV	<150MV	<200MV	<0.5MV	<10MV
F. NULL		<5MV	<10MV	<10MV	<60μV	<5MV
ISOLATION REQUIREMENT		NONE	REF & SIGNAL	NONE	NONE	NONE
AMBIENT TEMP. RANGE		-55°C +85°C	-30°C +71°C	0°C 50°C	0°C 50°C	0°C 50°C
PHYSICAL SIZE		1.7×0.6 ×1.56	1×1 ×2.5	0.95×1 ×2.5	1×1.7 ×0.75	1×1.7 ×0.75
TERMINAL TYPE		H.P. PIN.	PIN	PIN	HP PIN.	HP PIN.
INTERNAL REFERENCE		No	No	No	No	No
D.C. POWER		15V ±2½%	28V	±15V	±15V	±15V

DEMODULATOR TABULATION SHEET	UNIT NO.	DMD 1040-1	DMD 1028-1	DMD 1034-1	DMD 1053-1	
REFERENCE						
A. VOLTAGE		115V	15V	26V	115V	
b. FREQUENCY		400~	50~-60~	400~	400~	
C. IMPEDANCE		>100K	≈ 5.1K.	>8K	>100K	
SIGNAL						
A. VOLTAGE RANGE		0-3.2V	0-10V	0-5V	0-5V	
b. FREQUENCY		400~	50~-60~	400	400~	
C. IMPEDANCE		>3K	≈ 3K	>10K	>200K	
OUTPUT						
A. MAX. OUTPUT		±5V±5%	±10V±5%	±5V±5%	±2.5V±5%	
b. LOAD		50K.	10K	10K.	10K	
C. LINEARITY		±1%FS.	±1%FS	±1%FS	±1%FS	
D. FREQUENCY RESP.		No FILTER.		≈100~	40~	
E. RIPPLE		<10MV	<400MV	<450MV	<125MV	
F. NULL			<15MV.	<15MV	<4MV	
ISOLATION REQUIREMENT		ALL TERMINALS ISOLATED	REFERENCE AND OUTPUT ISOLATED	OUTPUT ISOLATED	SIGNAL AND REFERENCE ISOLATED	
AMBIENT TEMP. RANGE		-30°C +85°C	-10°C +55°C	0°C +85°C	-20°C +50°C	
PHYSICAL SIZE		1×1 ×2.5	1.9×1.25 ×2.9	0.6×0.9 ×1.8	1×1 ×2.5	
TERMINAL TYPE		PIN	HP	PIN.	PIN	
INTERNAL REFERENCE		No	Yes	Yes	No	
D.C. POWER		No	+15V	±15V	24-32V	